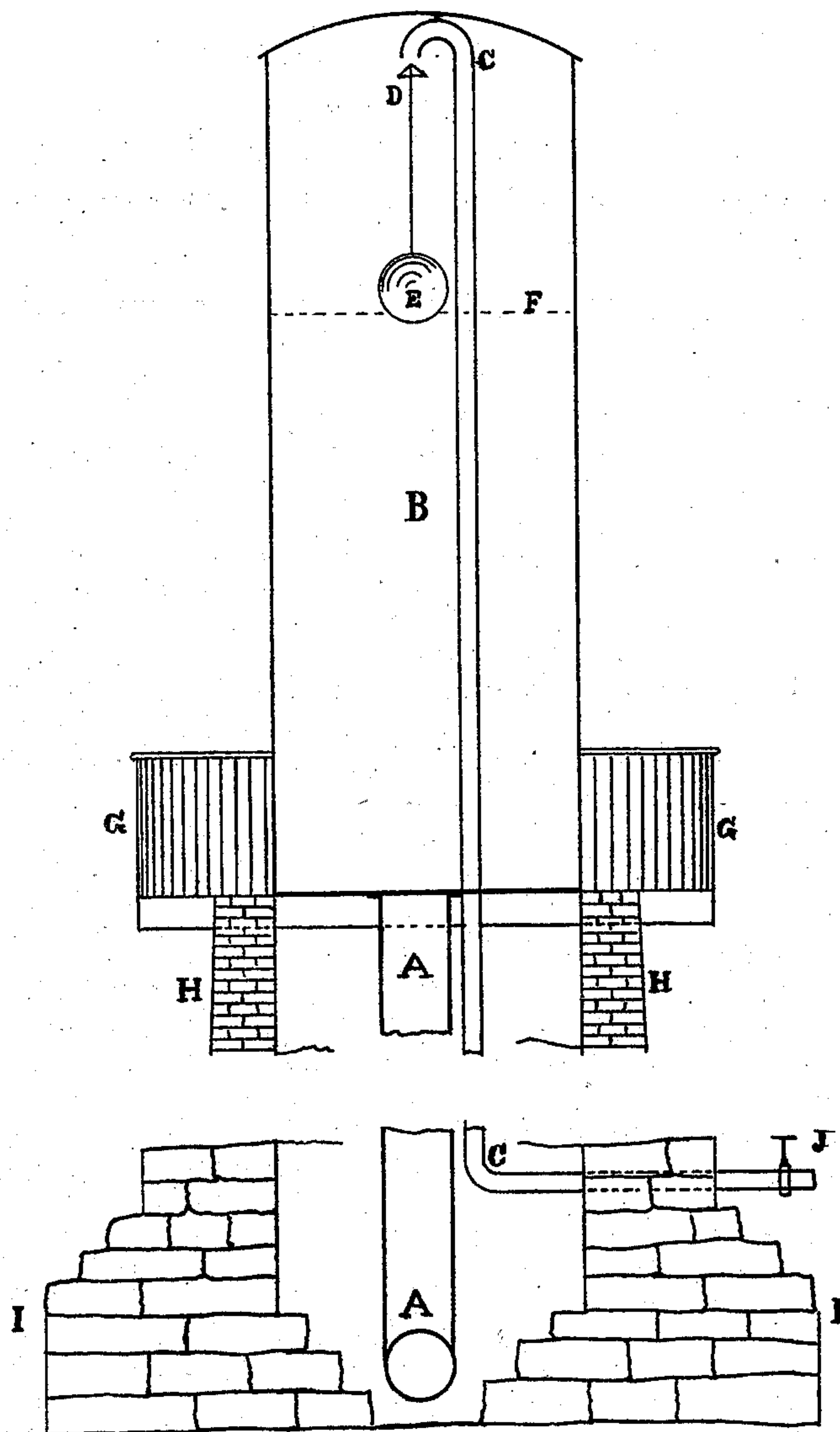


G. W. PEARSONS.
Stand-Pipes for Water-Works.

No. 143,711.

Patented Oct. 14, 1873.



WITNESSES

William L. Cameron
Mortimer G. Riley

INVENTOR

Galen W. Pearsons,

UNITED STATES PATENT OFFICE.

GALEN W. PEARSONS, OF OGDENSBURG, NEW YORK.

IMPROVEMENT IN STAND-PIPES FOR WATER-WORKS.

Specification forming part of Letters Patent No. **143,711**, dated October 14, 1873; application filed May 24, 1873.

To all whom it may concern:

Be it known that I, GALEN W. PEARSONS, of Ogdensburg, New York, have invented certain Improvements in Stand-Pipes for Water-Works, reference being made to the accompanying drawing, of which the following is a specification:

This invention relates to the use of stand-pipes in water-works.

A A is the stand-pipe; B, enlarged chamber forming the upper portion of the same; C C, air-pipe; D, valve closing the air-pipe by means of the float marked E, when the water rises above the dotted line F indicating its surface; G G, balustrade surrounding the upper portion of the stand-pipe; H H, top of tower supporting stand-pipe; I I, base of tower; J, stop-valve in air-pipe C C, which may be closed by hand when desired, performing the same office as the automatic valve D.

The operation of the device is as follows: The stand-pipe A A B, being of sufficient height for the usual requirements of pressure, is closed at the top and provided with a pipe permitting the free ingress or egress of air, and thus performing the same office and in the same manner as is usual with stand-pipes used in connection with water-works machinery for the purpose of equalizing water-pressure. When it is desired to increase the pressure, the pumping of water above the line F, by closing the valve D, changes the upper portion of the chamber G to an air-chamber, thus permitting the increase of pressure in the

stand-pipe to any desired amount; or the valve J may be closed at any time for the same purpose.

The object of the invention is to obviate the necessity of building stand-pipes to the great height required to obtain pressure by gravity alone, when such additional pressure is required for throwing water for the suppression of fires, or other purposes, directly from the fire-hydrants, without the intervention of other power than the pressure of water in the water-mains, and, also, to save the time necessary for filling a stand-pipe to such additional height.

I am aware that the use of stand-pipes in various forms, for the purpose of maintaining a hydrostatic equilibrium in connection with the use of pumping machinery for water-works, is common; I therefore make no claim to the stand-pipe as such, nor to the enlarged portion represented as forming the upper part thereof, nor to the tower or its adjuncts in any manner.

What I claim as my invention is—

An air-pipe or pipes furnished with valves operated either automatically or by hand, in connection with the top of the stand-pipe, substantially as and for the purpose herein set forth.

GALEN W. PEARSONS.

Witnesses:

WILLIAM L. CAMERON,
M. G. RILEY.